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Cox et al.

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Wash.[*] **Notice:** The portion of the term of this patent
subsequent to Mar. 31, 2009 has been
disclaimed.[21] **Appl. No.:** **843,423**[22] **Filed:** **Feb. 28, 1992****Related U.S. Application Data**[62] Division of Ser. No. 484,379, Feb. 23, 1990, Pat. No.
5,100,688.[51] **Int. Cl.⁵** **A23L 1/31; A23L 1/313;**
A23L 1/314[52] **U.S. Cl.** **426/104; 426/514;**
426/515; 426/601; 426/647; 426/657; 426/802[58] **Field of Search** **426/104, 646, 573, 574,**
426/575, 577, 578, 657, 802, 647, 601[56] **References Cited****U.S. PATENT DOCUMENTS**

3,658,550	4/1972	Hawley	426/574
4,138,505	2/1979	Hart et al.	426/647 X
4,143,168	3/1979	Bernotavicz	426/647 X
4,293,576	10/1981	Sentance	426/574 X
4,324,807	4/1982	Kim et al.	426/574 X
4,741,906	5/1988	Paardekooper et al.	426/574 X
4,844,922	7/1989	Uemura et al.	426/104
4,880,654	11/1989	Okada	426/574

FOREIGN PATENT DOCUMENTS

876090	10/1981	U.S.S.R.	426/574
912127	3/1982	U.S.S.R.	426/574

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[57]

ABSTRACT

Meat products which, before and after preparation, have the aroma, appearance, and taste of meat products of a comparable character but contain substantially less cholesterol and/or saturated fats and typically retain their juiciness and taste upon standing after being cooked for a longer time than conventional meat products do. The reduced cholesterol/saturated fat content is realized by in part substituting for natural adipose an artificial adipose based on an emulsion of: (a) blood plasma, preferably from the same specie of animal as the meat from which the product is made, and (b) cholesterol-free or low cholesterol fats and oils which may also be free of saturation or have a low degree of saturation. Various agents can be employed to convert the blood plasma/lipid emulsion to a gelatinous form in which it closely resembles a natural adipose; and the adipose can be formulated so that it will become colorless as the product is prepared by cooking like natural adipose does. The adipose can also be used for other purposes. The artificial adiposes contain a protein/saccharide system which can also be used to provide a host of other new and valuable products including skins and membranes, dewatering agents, coagulants, and stabilizers for lipid/aqueous carrier systems with high concentrations of lipids.

9 Claims, No Drawings